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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,528	12/05/2003	Shinzo Matsui	SAS2-PT065	2365

3624 7590 07/15/2005

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EXAMINER

KOVAL, MELISSA J

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/729,528

Applicant(s)

MATSUI, SHINZO

Examiner

Melissa J. Koval

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.
 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
 4a) Of the above claim(s) 5,8,13-16,18,19,21-24,27-29,31,32,35-40 and 43 is/are withdrawn from consideration.
 5) ☐ Claim(s) _____ is/are allowed.
 6) ☒ Claim(s) 1-4,6,7,17,20,30,34,41,42 and 44 is/are rejected.
 7) ☒ Claim(s) 9-12,25,26 and 33 is/are objected to.
 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 12/5/2003.
 4) ☐ Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) ☐ Notice of Informal Patent Application (PTO-152)
 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 5, 8, 13-16, 18, 19, 21-24, 27-29, 31, 32, 35-40, and 43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 9, 2005.

Claim Rejections - 35 USC § 103

Claims 1-4, 6, 7, 17, 20, 30, 34, 41, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Noguchi 6,719,428 B2 in view of Li et al. 6,726,329 B2.

Claim 1 sets forth: "A display apparatus capable of illuminating a light modulation device with a light from a light emitting body to display an image on a display plane, the apparatus comprising (See Figure 1 of Noguchi '428, for example.):

a plurality of light emitting bodies different from one another in emitted light color (See light source 2.);

a light receiving device configured to detect the light from the light emitting bodies and to output an amount of light received (See display device 3.); and

a color balance adjustment control section configured to adjust and control a color balance in the display plane in accordance with the amount of light received by the light receiving device (See both irregular color and irregular luminance correction circuit 1 and correction value generation circuit 9.) ,

wherein the color balance adjustment control section is configured to be capable of identifying the emitted light color of the light emitting body relating to the amount of light received (See memory 7 comprising storage for a luminance distribution value, a luminance inclination value, a screen distribution value, and a correction value.).”

Noguchi et al. ‘428 B2 is silent to the elements comprised by light source 2. The projector taught by ‘428 B2 utilizes an RGB color video signal.

However, light sources comprising a plurality of light emitting bodies are well known in the art as shown by Li et al. ‘329 B2. See the SUMMARY OF THE INVENTION of ‘392 B2, for example.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize an RGB photodiode arrangement as taught by Li et al. ‘392 B2 for the light source 2 shown by Noguchi et al. ‘428 B2, thus meeting the limitations of claim 1. The motivation for one having ordinary skill in the art to make the substitution would be to satisfy power consumption, heat generation, cost and size requirements for the overall projection system.

With respect to claims 2 and 3, refer to semiconductor LED array 11, for example.

With respect to claims 4, 6 and 7, see column 4, lines 61 through 67, column 5 in its entirety and column 6, lines 1 through 50.

With respect to claims 17 and 20, see Figure 2 of Li et al. ‘329 B2.

Claims 30, 34, 41, 42 and 44 are rejected for the same reasons already applied to rejected claim 1.

Allowable Subject Matter

Claims 9-12, 25, 26, and 33 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Each and every limitation of claim 9 in combination renders the claim allowable over the prior art of record. The prior art of record neither shows nor suggests a change (decrease) in supply current correlating with emitted light amount ratio between the emitted light colors, etc. Similarly, each and every limitation of claim 11, in combination, renders that claim allowable over the prior art of record.

With respect to claim 25, the prior of record neither shows nor suggests a display mode and an adjustment mode as claimed.

With respect to claim 33, the prior art of record neither shows nor suggests a function of detecting and a function of notifying a user as claimed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Yoshihara et al. U.S. Patent 6,762,743 B2 teaches a display device employing a field-sequential method.

Goto et al. U.S. Patent 6,869,190 B2 teaches a projection display device.

Art Unit: 2851

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa J. Koval whose telephone number is (571) 272-2121. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MJK



Handwritten signature of Melissa J. Koval, with the name "Melissa J. Koval" written in cursive below the signature.